

REMARKS

Claims 13-27 are pending in this application. Claims 13, 14, 18, 19 and 21 were rejected in the office action dated 30 June 2003 (the "Office Action"). Claims 15-17, 20 and 22-27 were objected to. Applicant has amended claims 13 and 21 in order to more particularly and completely claim the present invention. No new matter has been introduced. Allowance of claims 13-27 is respectfully requested.

Claims 13, 14, 18, 19 and 21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Neill (5,242,025).

Neill discloses spacing between geophones in the range from about 1 ft. to thousands of feet, and but more typically with a range from about ten to hundred feet (Col 3 ll. 52-55). Thus, Neill describes a geophone spacing only at the very limit of receiver spacing recited in the current claims. However, the receivers in Neill are arranged in line arrays (see figures 1, 2, and 3). The receivers of Neill (see for example figure 1) are not located substantially in a plane at or near the earth surface. The line of receivers in Neill are lowered into wellbores potentially far away from the earth surface. Furthermore, the receivers of Neill do not define triangles in such a plane as in the amended claims.

In the present application the receivers are preferably clustered such that each group of three receivers form a triangle and not a line array. This distinction is important because in a seismic survey a one-dimensional array as disclosed by Neill would among other disadvantages not be capable of resolving seismic signals coming from lateral ("cross-line") directions.

The teaching of Neill does not disclose or suggest receiver arrangement others than line arrays.

Having clarified and emphasized this distinction in the amended claims, Applicants believe that the present application and claims are in proper condition for allowance. Such

allowance is earnestly requested. If the Examiner is contemplating any action other than allowance of all pending claims, the Examiner is urged to contact Applicant's representative, William B. Batzer.

Respectfully submitted,



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